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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,570	09/17/2001	Cesar Anatolio Garcia Vidrio	P 281354	6336

7590 11/23/2005

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EXAMINER	
KRECK, JOHN J	
ART UNIT	**PAPER NUMBER**
3673	

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/857,570	VIDRIO ET AL.	
	Examiner	Art Unit	
	John Kreck	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *13*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The amendment dated 9/4/2004 has been entered.

Claims 15-20 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 15 and 19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 is unclear regarding the "expenditure". "Expenditure" is not commonly considered to be a property of gases which can be adjusted in an industrial process; the term is not defined by the claim, the specification does not provide support for what the meaning of this term is, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 19 is unclear regarding the "air contained in the effluences" used to augment the concentration of N2. This is unclear because it is believed that the effluences are treated to obtain the product containing N2 and CO2: How is the "air contained in the effluences" different from the effluences treated to obtain the CO2 and N2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kupper (U.S. Patent number 5,219,544) in view of Martin, et al. (U.S. Patent number 4,546,829).

Kupper discloses a process for reducing contamination in cement clinker production including subjecting effluences to at least adsorption.

Kupper lacks the adjusting to obtain gases compatible with hydrocarbons, and the injecting.

Martin teaches the advantages of using treated combustion gasses for recovering hydrocarbons in oil well deposits. Martin also teaches the steps of adjusting and injecting. One of ordinary skill in the art would have known that these steps provide the advantage of making a waste product (i.e. the combustion gases) useful to recover a valuable product from an oil well. Alternatively, one of ordinary skill in the art would have found it obvious to have used the gases generated by the Kupper process in a hydrocarbon injection process as taught by Martin since CO2 and N2 are fungible commodities: in a hydrocarbon recovery process it does not matter HOW the gases were produced or isolated.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Kupper process to have included the steps of adjusting and injecting as called for in claim 15.

With regards to claim 16: Kupper fails to explicitly disclose the CO2 and N2; Official Notice is taken of the fact that CO2 and N2 are present in such gases.

Regarding claim 18: Martin teaches the desirability of purifying the exhaust gases to obtain CO2 and N2. With regards to the percentages; since the percentage of Nitrogen in the atmosphere is approximately 80%, and oxygen approximately 20%; combustion using air (as disclosed by Kupper or Martin) would inherently result in 785%*85% N2 and 15-25% CO2 as called for in claim 18; the sum of CO2 and N2 being 100% would naturally result from Martins' teaching of purifying the gas to obtain N2 and CO2.

With regards to claim 19: it is apparent that the N2 in the effluences is mostly from air.

With regards to claim 20: Kupper fails to explicitly teach the combustion fuel.

Official Notice is taken of the fact that fossil fuels are commonly used for such combustion, because they are inexpensive and easily combustible. It would have been obvious to one of ordinary skill in the art at the time of the invention to have practiced the Kupper process, as modified , using fossil fuels.

3. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kupper (U.S. Patent number 5,219,544) in view of Martin, et al. (U.S. Patent number 4,546,829) and further in view of Puri (U.S. Patent number 5,133,406).

Kupper and Martin teach all of the limitations of claims 15 and 16, from which these claims depend. Kupper fails to explicitly disclose the recycling of oxygen and water.

Puri teaches that in a similar process, it is desirable to recycle oxygen (col. 3, lines 57-65) and water (col. 4, line 38-40) in order to eliminate unwanted components from the injection gas.

It would have been further obvious to one of ordinary skill in the art at the time of the invention to have practiced the Kupper process (as modified in view of martin) with recycling of oxygen and water, as taught by Puri, and as called for in claim 17, in order to eliminate unneeded components from the injection gas.

Response to Arguments

4. Applicant's arguments with respect to claims 15-20 have been considered but are largely moot in view of the new ground(s) of rejection.

5. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, one of ordinary skill in the art would have recognized the advantages of providing a use for the waste gases generated by the Kupper process.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is 571-272-7042. The examiner can normally be reached on Mon, Tu, Th: 530-400; Fri: telework.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on 571-272-7049. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John Kreck
Primary Examiner
Art Unit 3673

21 November 2005